

# Treatment of Itching

## A Preliminary Report on Results with a New Oral Antipruritic

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BECAUSE THE CAUSES of pruritic conditions are so various and because the peripheral and central thresholds for itching differ considerably between persons (and in the same person at different times), the treatment of this symptom is often difficult and discouraging to physicians. Antihistamine and vasodilator agents afford only partial or transient relief and only in selected types of pruritis; and colloid baths and topical lotions and ointments, although widely used, also are unreliable as to result and are inconvenient to use.

The ideal antipruritic agent should be rapid-acting, easy to administer, effective regardless of the cause of pruritis and compatible with treatment directed at the cause of the itching. Moreover, to be ideal, it should not bring about side effects. Trimeprazine (Temaril\*), a new phenothiazine derivative possessing central depressant,<sup>5</sup> antihistaminic, and antiserotonin activity,<sup>2</sup> has been reported<sup>1,3,4</sup> to produce clinical results which give some indication that it represents a significant advance toward the ideal. This report summarizes our evaluation of the clinical efficacy and safety of this new drug.

### METHOD

During a period of eight months, a series of 215 (80 male, 135 female) private patients were treated for moderate to severe pruritis associated with a variety of acute or chronic skin diseases (Table 1). The patients ranged in age from 30 months to 78 years (average age, 39 years). Doses of trimeprazine were based on the severity of the itching and ranged from 2.5 mg. (one tablet) daily, taken at bedtime, to 10 mg. daily (1 tablet four times a day). The usual dose for children was 2.5 mg. twice a day; for adults, 2.5 mg. three times a day. The last dose of the day was frequently taken at bedtime and, in some patients, was increased to twice the usual dose to control nighttime itching. The duration of treatment ranged from one day (as in urticaria) to eight months (as in senile pruritis). The average duration of treatment was one or two weeks. Since trimeprazine is an antipruritic and has no effect on

• A new antipruritic, trimeprazine, was used in the treatment of itching associated with a variety of dermatologic disorders in 215 patients.

Good to excellent relief of itching was experienced by 71 per cent of the patients, fair relief by 15 per cent and poor relief by 14 per cent.

Side effects included mild and transient drowsiness or dizziness that cleared spontaneously; six cases of drowsiness that necessitated discontinuance of the drug; three cases of drowsiness that was controlled by reduction of the dosage; and one case of generalized eruption that cleared upon discontinuance of the drug.

skin lesions, specific therapy to control the cutaneous disorder was used when necessary. However, no other oral antipruritic agents, such as antihistamines, steroids, tranquilizers or sedatives, were used with trimeprazine. Blood specimens were drawn from 25 patients, taken at random, before and following treatment with the drug to determine the effect of trimeprazine on bloodforming mechanisms. Of the patients selected for this part of the evaluation, 12 had received the drug for one month or less, and 13 for more than a month.

### RESULTS

Results were considered *excellent* when the patient reported complete and lasting control of itching; *good* when there was substantial or complete but transient control; *fair* when there was partial and transient control; and *poor* when there was no control. The results reported by the patients were qualified by physical examinations of the patient for signs of scratching such as excoriation, wheals, papules, fissures or crusts.

By these criteria, 42 (20 per cent) of the patients obtained excellent relief; 110 (51 per cent), good relief; 33 (15 per cent), fair relief and 30 (14 per cent, poor relief (Table 1). Control of itching almost always occurred within an hour after the first dose of trimeprazine and was maintained throughout the remainder of the day by subsequent doses of the drug. Itching was effectively controlled throughout the night (the time at which pruritis is usually most pronounced) in most patients who received a single dose of trimeprazine at bedtime.

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\*T.M. for dl-10-(3-dimethylamino-2-methylpropyl)-phenothiazine tartrate, Smith Kline & French Laboratories, Philadelphia, Penna.

TABLE 1.—Results of Use of Trimeprazine for Relief of Itching in 215 Cases of Pruritus of Various Causes

Diagnosis	Excellent	Good	Fair	Poor	Total
Neurodermatitis .....	11	19	6	4	40
Contact dermatitis .....	9	35	9	5	58
Eczematous eruptions ....	4	19	5	4	32
Pruritis ani, vulvae					
and scroti .....	2	11	1	....	14
Pruritis, idiopathic .....	....	4	1	....	5
Seborrhea .....	1	1	1	3	6
Seborrheic keratosis .....	....	1	....	....	1
Psoriasis .....	1	1	3	2	7
Herpes zoster .....	1	....	....	....	1
Lichen planus .....	....	4	....	....	4
Dyshidrosis .....	4	4	1	3	12
Urticaria .....	3	3	3	3	12
Xanthomatosis .....	....	2	....	....	2
Pityriasis rosae .....	4	3	1	1	9
Dermatophytosis .....	....	1	1	1	3
Dermatitis herpetiformis	2	2	1	4	9
Totals .....	42	110	33	30	215
	(20%)	(51%)	(15%)	(14%)	

In no case was the drug antagonistic to specific therapy. In patients who had relief of itching, specific therapy was more effective and efficient than is usually the case, since the healing process was not retarded by scratching or irritation of the lesions and adjacent skin areas. In addition, the relief of itching afforded by trimeprazine made it much easier to establish and maintain good patient-physician rapport.

The overall results obtained in the entire group (71 per cent good or excellent) were about the same as those obtained in each of three diagnostic categories within the group that contained enough patients (30 or more) to permit comparisons. In each of these diagnostic categories—neurodermatitis, contact dermatitis and eczematous eruptions—good to excellent results totaled 75 per cent, 76 per cent and 72 per cent respectively. Further clinical studies are required, of course, before it can be determined whether these ratios of results would be duplicated in all dermatologic disorders.

There were no significant changes in the content of leukocytes in the blood or in the leukocyte differential in the 25 patients subjected to hematologic study.

Mild to moderate drowsiness was reported by a significant number of patients. In some patients it was transient; in others, more lasting. In most cases drowsiness was a desirable effect, for it permitted patients to sleep better. We found it necessary, however, to discontinue use of the drug in six patients

who complained of drowsiness so pronounced as to interfere with their normal activity. In three other patients, drowsiness was controlled by reducing the dosage.

One patient complained of mild and transient dizziness which disappeared as therapy was continued, and in one other patient a generalized eruption appeared after administration of the drug and subsided upon discontinuance.

#### COMMENT

Trimeprazine seems to fulfill many although not all of the requirements of an ideal antipruritic. Its specific antipruritic effect relieved itching in over 70 per cent of the patients treated, regardless of the cause of the pruritis. This is, of course, an improvement over the effects ordinarily expected with the antihistamine and vasodilator agents, colloid baths or topical lotions and ointments. While specific therapy was also required, the relief of itching provided by trimeprazine made such therapy more efficient and effective, and greatly reduced the sequelae commonly observed in dermatologic conditions—secondary infections and excoriation.

No lessening of effectiveness of trimeprazine as therapy continued was reported during this study. The convenient dosage form obviated the difficulties associated with the use of topical lotions and ointments, or colloid baths.

The absence of serious side effects, and the negative findings in the small group of patients on whom hematologic studies were done, substantiated other reports<sup>1,3,4</sup> that the drug is safe. Further use of the drug is required, however, to describe its clinical safety more clearly.

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